

IN THE CLAIMS

Claims 1-20 are canceled.

21 (new) An amplifiable genetic particle comprising:
a surface containing a protein to which one or more recombinantly expressed peptides are covalently linked wherein each of the one or more peptides has a selenocysteine located at a specific and unique site.

22 (new) An amplifiable genetic particle of claim 21, wherein the covalent linkage between the selenocysteine containing peptide and the surface protein comprises a native peptide bond.

23. (new) The particle according to claim 21, wherein the peptide is expressed by a DNA having a TGA codon and a part or all of a selenocysteine insertion sequence.

24. (new) The particle according to claim 23, wherein the selenocysteine insertion sequence begins one or more nucleotides from the TGA codon.

25. (new) The particle according to claim 21, wherein the one or more peptides are fused to a surface protein expressed on the surface of the amplifiable genetic particle.

26. (new) The particle according to claims 21 or 25, selected from a phage, a polysome, a virus, a cell or a spore.

27. (new) A product according to claim 21, wherein the displayed selenocysteine residue is flanked on either or both sides by one or more randomized amino acid.

28. (new) A product according to claim 21, further comprising one or more randomized amino acid residues flanked by a cysteine residue on one side and a selenocysteine residue on the other side.

29. (new) The product according to claim 24, wherein the selenocysteine insertion sequence is obtained from the group consisting of eubacteria, eukarya and archaea.

30. (new) The product according to claim 21, wherein the selenocysteine is capable of chemical derivatization of the selenol group.

31. (new) The product according to claim 30, wherein the chemical derivatization results from a nucleophilic substitution reaction.

32. (new) The product according to claim 30, wherein the chemical derivatization results from an oxidation reaction.

33. (new) The product according to claim 30, wherein the chemical derivatization results from a metal coordination reaction.

34. (new) The product according to claim 30, wherein a product of chemical derivatization is a chemical functionality selected from the group consisting of enzyme substrates, enzyme cofactors, enzyme inhibitors, receptor ligands and cytotoxic agents.

35. (new) The amplifiable genetic particle according to claim 21, wherein the one or more peptides further comprise at least one peptide that forms an enzyme substrate or is modified at the selenocysteine to form an enzyme substrate, the amplifiable genetic particle further comprising a recombinantly expressed enzyme on the surface of the amplifiable genetic particle.

36. (new) The amplifiable genetic particle according to claim 35, wherein the reaction product of the enzyme and the enzyme substrate is located on the surface of the amplifiable genetic particle.

37. (new) The amplifiable genetic particle of claim 36, wherein the reaction product is capable of binding to an affinity substrate.

38. (new) An amplifiable genetic particle, according to claim 35, wherein the recombinantly expressed enzyme is selected from a library of variants of a single enzyme, wherein each variant contains one or more amino acid substitutions relative to the native enzyme.

39. (new) An amplifiable genetic particle according to claim 35, wherein the recombinantly expressed enzyme is selected from an expressed c-DNA library.

For the reasons set forth above, Applicants respectfully submit that this case is in condition for immediate allowance. Early and favorable consideration leading to prompt issuance of this Application is earnestly solicited. Applicants petition for an extension of five months under 37 C.F.R. 1.136 and enclose a check for \$1,159 covering the extension fees and additional claim fees.

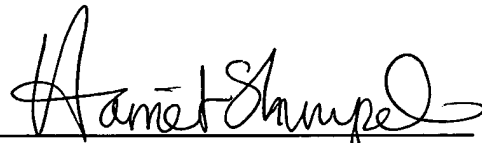
Should the Examiner wish to discuss any of the remarks made herein, the undersigned attorney would appreciate the opportunity to do so. Thus, the Examiner is hereby authorized to call the undersigned collect at the number shown below.

Respectfully submitted,

NEW ENGLAND BIOLABS, INC.

Date: December 19, 2003

Customer No.: 28986

A handwritten signature in cursive script, appearing to read "Harriet Strimpel", written over a horizontal line.

Harriet M. Strimpel D.Phil.

(Reg. No.: 37008)

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